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10/777,479	02/12/2004	Katsuhito Aoki	HGM-127-A	2304
21828 7590 10/04/2010 CARRIER BLACKMAN AND ASSOCIATES 43440 WEST TEN MILE ROAD EATON CENTER NOVI, MI 48375				
EXAMINER				
FRISBY, KESHA				
ART UNIT		PAPER NUMBER		
3715				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/777,479

**Applicant(s)**

AOKI ET AL.

**Examiner**

KESHA FRISBY

**Art Unit**

3715

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 and 9-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/22)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/22/2010 has been entered.

***Status of Claims***

***After the request for continued examination was filed on 6/22/2010, claims 1-7 & 9-16 are pending in this application.***

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-3 & 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Busse et al. (U.S. Publication Number 2003/0216161), Aoki (JP 2002-297017), Walker et al. (U.S. Publication Number 2003/0033161) and Brink et al. (U.S. Publication Number 2003/0173743).**

Referring to claim 1, Busse et al. discloses an interactive driving simulation apparatus (simulation module) for teaching a student operator how to operate a two-wheeled

vehicle on a simulated road (paragraph 0022), wherein said apparatus allows the student operator (player) to simulate driving a two-wheeled vehicle (paragraph 0022), wherein said apparatus is operable to display a virtual environment as a screen image on a display unit based on a real-time driving routine of a simulated vehicle by the student operator (paragraph 0023) and a selector which automatically selects performance evaluation comments based on operator input in a simulated driving route sequence, by the driving operation of the student operator in a driving route sequence determined in advance in a running route upon the simulation apparatus (abstract: season mode, paragraphs 0005, 0007, 0008, 0012, 0019, 0020, 0022, 0023, 0025, 0062 & 0065), wherein said performance evaluation comments are determined solely on the basis of input from the student operator as interpreted by an electronic controller (abstract: season mode, paragraphs 0005, 0007, 0008, 0012, 0019, 0020, 0022, 0023, 0025, 0062 & 0065), wherein said performance evaluation comments are provided to aid the student operator in assessing current skills so that the student operator can improve his or her driving skills (paragraph 0023) and wherein said performance evaluation comments are phrases which the student operator in improving his or her driving skills (paragraphs 0003, 0005, 0007, 0008, 0020, 0023, 0025-0028 & 0062-0066). *Busse et al. does not disclose wherein said apparatus is capable of recording a driving route sequence and replaying the driving route sequence on said display unit after the real-time driving routine is completed and a simulated operating environment comprising simulated city driving including two-way traffic flow and intersections with side roads. However, Aoki et al. teaches wherein said apparatus is capable of*

recording a driving route sequence (storage means & paragraphs 0012 & 0021) and replaying the driving route sequence on said display unit after the real-time driving routine is completed (paragraphs 0015, 0016, 0022 & 0025) and a simulated operating environment comprising simulated city driving including two-way traffic flow and intersections with side roads (Fig. 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include recording, replaying and a simulated operating environment, as disclosed by Aoki et al., incorporated into Busse et al. in order to memorize and review the condition data including the run state of the simulation car in time of simulation and to give the operator a simulated driving experience. *Busse et al./Aoki et al. does not teach wherein the display unit comprises a screen which simultaneously displays the simulated operating environment and superimposed written text of performance evaluation comments when the driving route sequence is replayed on said display unit.* However, Walker et al. teaches wherein the display unit comprises a screen which simultaneously displays the simulated operating environment and superimposed auditory of performance evaluation comments when the driving route sequence is replayed on said display unit (paragraph 0287). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include wherein the display unit comprises a screen which simultaneously displays the simulated operating environment and superimposed auditory of performance evaluation comments when the driving route sequence is replayed on said display unit, as disclosed by Walker et al., incorporated into Aoki et al./Busse et al. in order to provide commentary along with the replay of a relevant portion of the game. *Walker et al. does*

*not disclose written text.* However, Brink et al. et al. teaches several different types of communicating said comments (claim 14) and wherein said performance evaluation comments are phrases which aid the student operator in improving his or her driving skills (claim 14 and paragraph 0039). All of the component parts are known in Walker et al. and Brink et al. et al. The only difference is the combination of the "old elements" into a single device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include written text, as disclosed by Brink et al. et al., incorporated into Aoki/Walker et al. in order to be able to make the game comments accommodating for all users. Also both Walker et al. and Brink et al. et al. teaches methods for producing commentary, it would have been obvious to one skilled in the art to substitute one method for the other to achieve the predictable result of making the game comments accommodating for all users.

Referring to claim 2, Busse et al., as modified by Aoki et al., Walker et al. and Brink et al., discloses wherein said selector selects only a scene at which an unsafe action was performed by the operator within the simulated driving route sequence, and matches performance evaluation comments corresponding to said scene at which an unsafe action was performed to the operator's recorded performance (column 6 lines 5-12 of Aoki et al.), and wherein said display screen displays only the scene at which the unsafe action was performed and the performance evaluation comments (video display of Aoki et al.).

Referring to claim 3, Busse et al., as modified by Aoki et al., Walker et al. and Brink et al., discloses further comprising: a speaker (paragraph 0044: an audio speaker of

Walker et al.) for reading the performance evaluation commentary aloud upon reproduction thereof on said display unit.

Referring to claim 6, Busse et al., as modified by Aoki et al., Walker et al. and Brink et al., discloses wherein the apparatus is operable without requiring input from any person other than the student operator during testing (rider/operator of Aoki et al.) & (abstract: season mode, paragraphs 0007, 0020, 0022 & 0023 of Busse et al.) and replay (playback means of Aoki et al.).

**4. Claims 4 & 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Busse et al./Aoki et al./Walker et al. and further in view of Scott et al. (U.S. Publication Number 2004/0009812).**

Referring to claim 4, Aoki et al./Busse et al./Walker et al. discloses an interactive driving simulation apparatus according to claim 1 and in which the simulated operating environment and the performance evaluation commentary are simultaneously displayed thereon (see claim 1). Aoki et al./Busse et al./Walker et al. does not disclose wherein: said display unit is operable to pause the replay and to display a still-screen image. However, Scott et al. teaches wherein: said display unit is operable to pause the replay (paragraph 0029) and to display a still-screen image (inherent function of pause: when you pause an image the display has a still-screen image). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include pause the replay, as disclosed by Scott et al., incorporated into Aoki et al./Busse et al./Walker et al. in order for the instructor to discuss the driving situation with the user.

Referring to claim 5, Aoki et al./Busse et al./Walker et al. discloses an interactive driving simulation apparatus according to claim 1. Aoki et al./Busse et al./Walker et al. does not disclose wherein: said display unit reproduces a screen image recorded during a real-time simulation at a normal replay speed or temporarily pauses the replay and displays a still-screen image at a selected driving situation obtained from the driving route sequence, and performs fast-feeding replay or skipping replay at scenes other than the selected driving situation. However, Scott teaches wherein: said display unit (visual display 15) reproduces a screen image recorded during a real-time simulation at a normal replay speed or temporarily pauses the replay (paragraph 0029) and displays a still-screen image at a selected driving situation (inherent function of pause: when you pause an image the display has a still-screen image), and performs fast-feeding replay or skipping replay at scenes other than the selected driving situation (fast-forward). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the limitations of the display unit, as disclosed by Scott, incorporated into Aoki et al./Busse et al./Walker et al. in order to analyze the driving situation.

**5. Claims 7, 9 & 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Busse et al., Aoki et al. (U.S. Patent Number 5,415,550), Walker et al., Brink et al. and Aoki et al. (2002-297017).**

Referring to claim 7, Busse et al. discloses an interactive driving simulation apparatus (simulation module) for teaching a student operator how to operate a two-wheeled vehicle on a simulated road (paragraph 0022) allowing the student operator to simulate driving a two-wheeled vehicle (paragraph 0022), said driving simulation apparatus



comprising: a recorder which records the specific performance data (paragraphs 0008 & 0020); automatically selects performance evaluation comments based on the comparison of the specific performance data with the base line performance data without requiring concurrent input from an outside source other than the operator (abstract: season mode, paragraphs 0005, 0007, 0008, 0012, 0019, 0020, 0022, 0023, 0025, 0062 & 0065); wherein said performance evaluation comments are determined solely on the basis of input from the student operator as interpreted by an electronic controller (abstract: season mode, paragraphs 0005, 0007, 0008, 0012, 0019, 0020, 0022, 0023, 0025, 0062 & 0065), and wherein said performance evaluation comments are provided to aid the student operator in assessing current skills so that the student operator can improve his or her driving skills (paragraph 0023 & this is an inherent result of the method and the prior art showing that when the player races several times the player will only get better because the player knows the track. This is the intended purpose of racing games and wherein said performance evaluation comments are phrases which the student operator in improving his or her driving skills (paragraphs 0003, 0005, 0007, 0008, 0020, 0023, 0025-0028 & 0062-0066). The player applies what they learned in the next race). *Busse et al. does not disclose an electromechanical simulator which interacts with the student operator during performance of a driving route sequence to teach the student operator how to operate a two-wheeled vehicle on a simulated road, said electromechanical simulator comprising a support frame, a handlebar operatively connected to the support frame, a pedal mechanism operatively connected to the support frame, and a plurality of sensors for*

*measuring student input and for generating data corresponding to a specific performance by the student operator; a processor which compares comparing the specific performance data to a set of base line performance data, the comparison of the specific performance data with the base line performance data and wherein a virtual environment is displayed as a screen image on the display unit based on a real-time driving route sequence of a simulated vehicle by the student operator and a display unit comprising a display screen which simultaneously displays the simulated operating environment, a simulated operating environment comprising simulated city driving including two-way traffic flow and intersections with side roads, and the superimposed written text of performance evaluation comments when a portion of the driving route sequence is replayed on said display unit for each testing situation in which the operator's responses fail to perform at or above a specified level, wherein said apparatus is capable of recording a specific performance of a driving routine and replaying the specific performance on said display unit after the real-time driving routine is completed. However, Aoki ('550) teaches an electromechanical simulator (simulated motorcycle 300) which interacts with the student operator (rider) during performance of a driving route sequence, said electromechanical simulator comprising a support frame (body frame 302), a handlebar operatively connected to the support frame (steering handle 308), a pedal mechanism operatively connected to the support frame (inherent component of a motorcycle), and a plurality of sensors (column 5 lines 48-55) for measuring student input and for generating data corresponding to a specific performance by the student operator; a processor which compares comparing the*

specific performance data to a set of base line performance data, the comparison of the specific performance data with the base line performance data (column 20 lines 51-66) and wherein a virtual environment is displayed as a screen image on the display unit based on a real-time driving route sequence of a simulated vehicle by the student operator (Figs. 9A & 9B & the associated text). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an electromechanical simulator, as disclosed by Aoki ('550), incorporated into Busse et al. in order to provide an actual riding simulation apparatus. *Busse et al./Aoki et al. ('550) does not disclose a display unit which simultaneously displays the simulated operating environment, a simulated operating environment comprising simulated city driving including two-way traffic flow and intersections with side roads and the superimposed written text of performance evaluation comments when a portion of the driving route sequence is replayed on said display unit for each testing situation in which the operator's responses fail to perform at or above a specified level and wherein a virtual environment is displayed as a screen image on the display unit based on a real-time driving route sequence of a simulated vehicle by the student operator, and wherein said apparatus is capable of recording a specific performance of a driving routine and replaying the specific performance on said display unit after the real-time driving routine is completed.* However, Walker et al. teaches a display unit which simultaneously displays the simulated operating environment and the superimposed auditory of performance evaluation comments when a portion of the driving route sequence is replayed on said display unit for each testing situation in which the operator's responses

fail to perform at or above a specified level (paragraph 0287). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include wherein the display unit comprises a screen which simultaneously displays the simulated operating environment and superimposed auditory of performance evaluation comments when the driving route sequence is replayed on said display unit, as disclosed by Walker et al., incorporated into Busse et al./Aoki et al. ('550) in order to provide commentary along with the replay of a relevant portion of the game. *Busse et al./Aoki et al.('550)/Walker et al. does not disclose a simulated operating environment comprising simulated city driving including two-way traffic flow and intersections with side roads, written text and wherein a virtual environment is displayed as a screen image on the display unit based on a real-time driving route sequence of a simulated vehicle by the student operator, and wherein said apparatus is capable of recording a specific performance of a driving routine and replaying the specific performance on said display unit after the real-time driving routine is completed.* However, Brink et al. teaches several different types of communicating said comments (claim 14) and wherein said performance evaluation comments are phrases which aid the student operator in improving his or her driving skills (claim 14 and paragraph 0039). All of the component parts are known in Walker et al. and Brink et al. The only difference is the combination of the "old elements" into a single device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include written text, as disclosed by Brink et al., incorporated into Busse et al./ Aoki et al. ('550)/Walker et al. in order to be able to make the game comments accommodating for

all users. Also both Walker et al. and Brink et al. teaches methods for producing commentary, it would have been obvious to one skilled in the art to substitute one method for the other to achieve the predictable result of making the game comments accommodating for all users. *Busse et al./ Aoki et al. ('550)/Walker et al./Brink et al. does not disclose wherein a virtual environment is displayed as a screen image on a display unit based on a real-time driving routine of a simulated vehicle by the student operator and wherein said apparatus is capable of recording a specific performance of a driving routine and replaying the specific performance on said display unit after the real-time driving routine is completed.* However, Aoki et al. (2002-297017) teaches a simulated operating environment comprising simulated city driving including two—way traffic flow and intersections with side roads (Fig. 5), wherein a virtual environment is displayed as a screen image on a display unit based on a real-time driving routine of a simulated vehicle by the student operator (paragraph 0012: virtual experience), and wherein said apparatus is capable of recording a specific performance of a driving routine (storage means) and replaying the specific performance on said display unit after the real-time driving routine is completed (playback). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a simulated city, recording and playback, as disclosed by Aoki et al. (2002-297017), incorporated into Busse et al./ Aoki et al. ('550)/Walker et al./Brink et al.. in order for the student to receive the impression of driving in the real world, to memorize the current game state, as well as, present the game state to other individuals who might not be playing the game.

Referring to claim 9, Busse et al., as modified by Aoki et al. ('550)/Walker et al./Brink et al. and Aoki et al. (2002-297017), discloses wherein selected input devices of the electromechanical simulator are operable to perform a first set of functions during performance of a real-time driving route sequence by a student operator, and wherein the selected input devices are operable to perform a second set of functions which is different from the first set of functions during playback of a recorded performance (input device 13 of Aoki ('550)).

Referring to claim 10, Busse et al., as modified by Aoki et al. ('550)/Walker et al./Brink et al. and Aoki et al. (2002-297017), discloses further comprising a speaker for generating an audible reproduction of the selected performance evaluation comments (column 4 lines 65-67 of Aoki et al. ('550)).

**6. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Busse et al. in view of Huston et al. (U.S. Patent Number 6,146,143) and Walker et al..**

Referring to claim 11, Busse et al. discloses a) generating a prerecorded driving simulation course including a plurality of testing situations on a display screen of a driving simulator (paragraphs 0007-0009, 0020, 0021-0023, 0025, 0062, 0063, 0065 & 0066) and c) comparing the operator's responses to prerecorded base line data (abstract: season mode, paragraphs 0007, 0020, 0022 & 0023) and d) wherein said performance evaluation comments are determined solely on the basis of input from the student operator as interpreted by an electronic controller (abstract: season mode, paragraphs 0005, 0007, 0008, 0012, 0019, 0020, 0022, 0023, 0025, 0062 & 0065), and

wherein said performance evaluation comments are provided to aid the student operator in assessing current skills so that the student operator can improve his or her driving skills (paragraph 0023) and wherein said performance evaluation comments are phrases which the student operator in improving his or her driving skills (paragraphs 0003, 0005, 0007, 0008, 0020, 0023, 0025-0028 & 0062-0066). *Busse et al. does not disclose a) said driving simulation comprising simulated city driving including two-way traffic flow and intersections with side roads, b) recording the operator's real-time responses to each testing situation on a computer memory and d) replaying selected scenes from the simulation course on the display screen, c) comparing the operator's responses to prerecorded base line data and d) replaying selected scenes from the simulation course on the display screen superimposed with selected written text of automatically generated performance evaluation comments corresponding to the operator's recorded responses, for each testing situation in which the operator's responses fail to perform at or above a specified level.* However, Huston et al. teaches a) said driving simulation comprising simulated city driving including two-way traffic flow and intersections with side roads (Figs. 4-7 & 11 & the associated text), b) recording the operator's real-time responses to each testing situation on a computer memory (column 8 lines 37-56) and d) replaying selected scenes from the simulation course on the display screen (column 8 lines 40-42). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a simulated city, recording and replaying, as disclosed by Huston et al., incorporated into Busse et al. in order for the student to receive the impression of driving in the real world, to memorize and

review the condition date including the run state of the simulation car in time of simulation. *Busse et al./Huston et al. does not disclose d) replaying selected scenes from the simulation course on the display screen superimposed with selected written text of automatically generated performance evaluation comments corresponding to the operator's recorded responses, for each testing situation in which the operator's responses fail to perform at or above a specified level.* However, Walker et al. teaches d) replaying selected scenes from the simulation course on the display screen superimposed with selected performance evaluation comments corresponding to the operator's recorded responses, for each testing situation in which the operator's responses fail to perform at or above a specified level (paragraph 0287). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include replaying, as disclosed by Walker et al., incorporated into Huston et al./Busse et al. in order to provide commentary along with the replay of a relevant portion of the game.

Referring to claim 12, Busse et al., as modified by Huston et al. and Walker et al., teaches the method is performable without requiring input from any person other than the student operator during testing and replay (abstract: season mode, paragraphs 0007, 0020, 0022 & 0023 of Busse et al.).

Referring to claim 13, Busse et al., as modified Huston et al. and Walker et al., teaches further comprising a step of generating an audible performance evaluation commentary upon visual reproduction thereof on said display unit (paragraph 0287 of Walker et al.).



**7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Busse et al./Huston et al./Walker et al. and further in view of Scott et al. (U.S. Publication Number 2004/0009812).**

Referring to claim 14, Busse et al./Huston et al./Walker et al. discloses the method of claim 11 and in when the simulated operating environment and the performance evaluation commentary are simultaneously displayed thereon (see claim 11). *Busse et al./Huston et al./Walker et al. does not disclose wherein the replay is paused to display a still-screen image.* In addition, since the apparatus displays the environment and commentary simultaneously and has the ability to playback this information, the information can be paused. However, Scott et al. teaches wherein the replay is paused to display a still-screen image (paragraph 0029) (inherent function of pause: when you pause an image the display has a still-screen image). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include pause the replay, as disclosed by Scott et al., incorporated into Busse et al./Huston et al./Walker et al. in order for the instructor to discuss the driving situation with the user.

**8. Claims 15 & 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Busse et al., Aoki et al. (2002-297017), Aoki et al. (U.S. Patent Number 5,415,550), Walker et al. and Brink et al..**

Referring to claim 1, Busse et al. discloses an interactive driving simulation apparatus (simulation module) for teaching a student operator how to operate a two-wheeled vehicle on a simulated road (paragraph 0022) which allows a student operator (player) to simulate driving a two-wheeled vehicle (paragraph 0022), wherein said apparatus is

operable to display a virtual environment as a screen image on a display unit based on a real-time driving routine of a simulated vehicle by the student operator (paragraph 0023) and a selector which automatically selects performance evaluation comments based on operator input in a simulated driving route sequence, by the driving operation of the operator in a driving route sequence determined in advance in a running route upon the simulation apparatus, without requiring concurrent input from an outside source other than the operator (abstract: season mode, paragraphs 0005, 0007, 0008, 0012, 0019, 0020, 0022, 0023, 0025, 0062 & 0065) and wherein said performance evaluation comments are provided to aid the student operator in assessing current skills so that the student operator can improve his or her driving skills (paragraph 0023) and wherein said performance evaluation comments are phrases which the student operator in improving his or her driving skills (paragraphs 0003, 0005, 0007, 0008, 0020, 0023, 0025-0028 & 0062-0066). *Busse et al. does not disclose wherein said apparatus is capable of recording a driving route sequence and replaying the driving route sequence on said display unit after the real-time driving routine is completed, said driving simulation apparatus comprising: an electromechanical with which the student operator interacts during real-time performance of a driving operation, the electromechanical simulator including input devices actuated by the student operator during the real-time performance of a driving operation and a display unit, said simulated operating environment comprising simulated city driving including two-way traffic flow and intersections with side roads.* However, Aoki et al. teaches wherein said apparatus is capable of recording a driving route sequence (storage means & paragraphs 0012 &

0021) and replaying the driving route sequence on said display unit after the real-time driving routine is completed (paragraphs 0015, 0016, 0022 & 0025), said driving simulation apparatus comprising: an electromechanical simulator (30) with which the student operator interacts during real-time performance of a driving operation, the electromechanical simulator including input devices actuated by the student operator during the real-time performance of a driving operation (input interface 13) and a display unit (25 – display unit 28), said simulated operating environment comprising simulated city driving including two-way traffic flow and intersections with side roads (Fig. 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include simulated city, recording and replaying, as disclosed by Aoki et al., incorporated into Busse et al. in order for the student to receive the impression of driving in the real world, to memorize and review the condition data including the run state of the simulation car in time of simulation. *Busse et al./Aoki et al. does not disclose wherein the display unit comprises a screen which simultaneously displays both the simulated operating environment and the superimposed written text of performance evaluation comments to the student operator when the driving route sequence is replayed on said display unit and wherein selected input devices of the input devices of the electromechanical simulator are operable to perform a first set of functions during performance of a real-time driving route sequence by a student operator, and wherein the selected input devices are operable to perform a second set of functions which is different from the first set of functions during playback of a recorded performance.* However, Aoki et al. ('550) teaches an electromechanical

simulator (30 Simulation two-wheel barrow (simulation car) with which the student operator interacts during real-time performance of a driving operation, the electromechanical simulator including input devices actuated by the student operator during the real-time performance of a driving operation (input device 13) and wherein the selected input devices are operable to perform a second set of functions which is different from the first set of functions during playback of a recorded performance (input device 13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include input devices, as disclosed by Aoki et al. ('550), incorporated into Busse et al./Aoki (2002-297017) in order to be able to interact with the simulated two wheeled barrow. *Busse et al./Aoki (2002-297017)/Aoki et al. does not teach wherein the display unit comprises a screen which simultaneously displays both the simulated operating environment and the superimposed written text of performance evaluation comments to the student operator when the driving route sequence is replayed on said display unit and wherein selected input devices of the input devices of the electromechanical simulator are operable to perform a first set of functions during performance of a real-time driving route sequence by a student operator.* However, Walker et al. teaches wherein the display unit comprises a screen which simultaneously displays the simulated operating environment and superimposed auditory of performance evaluation comments when the driving route sequence is replayed on said display unit (paragraph 0287). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include wherein the display unit comprises a screen which simultaneously displays the simulated operating environment and

superimposed auditory of performance evaluation comments when the driving route sequence is replayed on said display unit, as disclosed by Walker et al., incorporated into Busse et al./Aoki (2002-297017)/Aoki et al. ('550) in order to provide commentary along with the replay of a relevant portion of the game. *Busse et al./Aoki (2002-297017)/Aoki et al. ('550)/Walker et al. does not disclose written text and wherein selected input devices of the input devices of the electromechanical simulator are operable to perform a first set of functions during performance of a real-time driving route sequence by a student operator.* However, Brink et al. teaches several different types of communicating said comments (claim 14) and wherein said performance evaluation comments are phrases which aid the student operator in improving his or her driving skills (claim 14 and paragraph 0039). All of the component parts are known in Walker et al. and Brink et al. The only difference is the combination of the "old elements" into a single device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include written text, as disclosed by Brink et al., incorporated into Busse et al./Aoki (2002-297017)/Aoki et al. ('550)/Walker et al. in order to be able to make the game comments accommodating for all users. Also both Walker et al. and Brink et al. teaches methods for producing commentary, it would have been obvious to one skilled in the art to substitute one method for the other to achieve the predictable result of making the game comments accommodating for all users.

Referring to claim 16, Busse et al., as modified by Aoki (2002-297017), Aoki et al. ('550), Walker et al. and Brink et al., discloses wherein the interactive driving simulator

apparatus further comprises a pre-stored selection of performance evaluation comments (abstract: season mode, paragraphs 0007, 0020, 0022 & 0023 of Busse et al.), and wherein the selector selects an appropriate one of the performance evaluation comments from the pre-stored plurality of performance evaluation comments based on the student operators performance during the driving route sequence (abstract: season mode, paragraphs 0007, 0020, 0022 & 0023 Busse et al.).

***Response to Arguments***

Note: The previous claim objection has been withdrawn due to the error being fixed in a previous amendment.

9. Applicant's arguments filed 6/22/2010 have been fully considered but they are not persuasive. The applicant asserts that many of the arguments presented by the examiner which go to refuting that references of Busses, Walker, and Brink being non-analogous art or that such references teach away from the claimed invention, the examiner is merely making conclusionary statements maintaining that in her view, such art is analogous and that such modification are proper based on the "catch-all" conclusion paragraphs at the end of the specification. Thus, the above noted rejections are incorrect because they are based exclusively on the examiner's use of impermissible hindsight, rather than from any specific teaching of the prior art. Relative to Walker and Brink, specifically regarding the Examiner's arguments against those arguments presented in Amendment E, applicant, again, respectfully traverses Examiner's arguments, as they are unsubstantiated and merely conclusory statements. The Examiner merely references the "boiler plate" type language in the Conclusion

section of the Specification of Walker, wherein Walker states that the invention as disclosed may be practiced with modifications or alterations and still be within the spirit and scope of the claims. Also, the Examiner uses the simple (very broad) statement in the first sentence of the first paragraph of Brink stating that Brink relates to the field of skill based games, without looking further in the sentence wherein the skill based games are competitive livestock judging games (not racing games). As such, the Examiner's has not presented any evidence against the arguments presented in Amendment-I) or Amendment- E to support her position that Walker or Brink is analogous art to the claimed invention. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, paragraph 0068 specifically states that the present invention in Busse is not limited to the disclosed embodiments and Aoki et al. teaches in column 25 lines 25-29 that many more modifications are possible. Therefore, Busse can be combined with Aoki et al.. In response to applicant's argument that Busse is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for

rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, in one instance that Busse discloses simulated environments. Further, in response to applicant's argument that Walker et al. is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Walker et al. discloses that Walker is analogous art via the conclusion paragraphs 0287, 0289 & 0290. The Remarks regarding Brink et al., the applicant suggests that the Brink et al. reference teaches away from the present invention, thus providing prima facie evidence of non-obviousness and also provides another example of non-analogous art. The applicant states that Brink et al. fails to disclose a system that operates without requiring any input from the instructor or outside source, other than the operator being tested. The examiner has not used Brink et al. to teach this feature, Brink et al. was used to teach the different ways of communicating comments. Therefore, the applicant's teaching away argument is moot. In response to applicant's argument that Brink et al. is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Brink et al. discloses that the present invention relates to the field of skill based games (paragraph



0001). Therefore, Brink et al. is analogous art. Now the applicant asserts as stated in previous amendments and contrary to the Examiner's arguments, Busse fails to disclose a selector which automatically selects performance evaluation comments based on operator input in a simulated driving route sequence. Further still, the deficiencies of the Busse reference are not taught by or even suggested by any of the applied references when considered singly or in combination thereof. Relative to the Examiner's rejections which rely on the prior art reference of Busse, applicant again notes that Busse discloses a video race car simulation that which displays compiled performance statistics and attributes, is significantly different than the claimed invention, which automatically selects and displays performance evaluation comments. The Examiner's assertion that the performance statistics of Busse are the same as the performance evaluation comments of the claimed invention is not justified based on the actual teachings contained within Busse. The Examiner merely states that the performance statistics are store in a memory 52 and are used in making a determination of the outcome of the game and further that (inherently) the information must be stored somewhere in order for it to be displayed. While it may be true that the performance statistics are first stored before they are displayed this is not the same as the claimed invention. Again, the system of Busse simply displays simulated gauges which display actual readings taken from various sensors within the simulator. Thus there is no automatic selection required with such a visual display. Further, Busse also discloses that options for the player to choose from that are displayed for the player at set intervals or at set times during the simulated race. These selectable queries, just as the

performance statistics displayed to the player, are not equivalent to the performance evaluation comments of the present invention. Thus, Busse discloses numerical statistics that are compiled by the simulation mode to simulate full or partial game play. Distinct from this, the performance evaluation comments of the present invention are constructive comments that come in the form of a phrase that aid the operator in improving his/her driving skills. The examiner disagrees with the applicants assertion because Busse does disclose automatically selecting and displaying performance evaluation comments. The compiled statistics, attributes and other information are stored in the database which resides in memory 52 as specified in paragraph 0020 of Busse. Since the compiled statistics, attributes and other information are stored in the database which resides in memory 52 and are later used in the simulation module for making a determination of the outcome of the race as specified in paragraph 0007 these statistics are inherently automatically selected and used and displayed in order to create the simulated race. Further, the information must be stored somewhere in order to be displayed, for example, paragraph 0023 states several display elements which include performance statistics. Although Busse discloses numerical statistics the originally filed Figures of the present invention displays instrument panel which displays the players speed. This too, can be used to help improve the driving skills of the player. The player may need to speed up or slow down at certain places in the race. Further, Brink teaches several different ways of communicating comments and one of those ways is via text. Therefore, text includes phrase(s). So the combination of the prior art references teaches the argued limitations. Further, in an apparatus claim "wherein" is

limiting if it further limits the structure and in this case it does not. Lastly, the arguments, rationale and rejections applied here apply to all claims of record.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KESHA FRISBY whose telephone number is (571)272-8774. The examiner can normally be reached on Monday-Friday 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on 571-272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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